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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/648,557	08/25/2000	Christian Devaux	1017753-000152	5736

21839 7590 07/02/2008

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EXAMINER	
PARKIN, JEFFREY S	

ART UNIT	PAPER NUMBER
1648	

NOTIFICATION DATE	DELIVERY MODE
07/02/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No.	Applicant(s)	
	09/648,557	DEVAUX ET AL.	
	Examiner	Art Unit	
	Jeffrey S. Parkin, Ph.D.	1648	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *03* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 December 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *31-53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *31-53* is/are rejected.

7)☒ Claim(s) *43 and 44* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Office Action

Status of the Claims

Acknowledgement is hereby made of receipt and entry of the amendment submitted 19 December, 2007. Claims 31-53 are pending in the instant application.

35 U.S.C. § 112, First Paragraph

The following is a quotation of the first paragraph of 35 U.S.C. § 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Written Description

The previous rejection of claims 1-10, 18, and 31-35 under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, is hereby withdrawn in response to applicants' amendment and arguments.

37 C.F.R. § 1.821-1.825

This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 C.F.R. § 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 C.F.R. § 1.821 through 1.825 for the reason(s) set forth below or on the attached Notice To Comply With Requirements For

Patent Applications Containing Nucleotide Sequence And/Or Amino Acid Sequence Disclosures. The sequence rules embrace all unbranched nucleotide sequences with ten or more bases and all unbranched, non-D amino acid sequences with four or more amino acids, provided that there are at least 4 "specifically defined" nucleotides or amino acids. The rules apply to all sequences in a given application, whether claimed or not. 37 C.F.R. § 1.821(d) stipulates that where the description or **claims** of a patent application discuss a sequence that is set forth in the "Sequence Listing" in accordance with paragraph (c) of this section, reference must be made to the sequence by use of the sequence identifier, preceded by "SEQ ID NO.:" in the text of the description or claims, even if the sequence is also embedded in the text of the description or claims of the patent application. Claim 31 references a decapeptide (KETWETWWTE) without a corresponding sequence identifier. However, the sequence appears to correspond to SEQ ID No.: 1 in the sequence listing. Applicants' attention is further directed to the final rules which were published in the *Federal Register* at 55 F.R. 18230 (May 1, 1990) and in the *Official Gazette* at 1114 O.G. 29 (May 15, 1990). The sequence rules went into effect on October 1, 1990. The sequence rules were subsequently revised effective July 1, 1998. See 63 F.R. 29634 (June 1, 1998) and 1121 O.G. 82 (June 23, 1998). The sequence rules were further revised on September 8, 2000 to allow submissions of the nucleotide and/or amino acid sequences and associated information on compact discs. See 65 F.R. 54604 (Sept. 8, 2000) and 1238 O.G. 145 (Sept. 19, 2000). See also M.P.E.P. § 608.05 and § 2422.03. The specification is objected to because it fails to comply with the sequence requirements.

37 C.F.R. § 1.75(c), Improper Dependent Claim

Claims 43 and 44 are objected to under 37 C.F.R. § 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 31 excludes a decapeptide consisting of the amino acid sequence KETWETWWTE (which corresponds to SEQ ID NO.: 1), yet claims 43 and 44 specify that the peptide of interest consists of SEQ ID NO.: 1. Further correction is required.

35 U.S.C. § 103(a)

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 31-53 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Morris *et al.* (1999) in view of Korber *et al.* (1998).[1] Morris et al. (1999) provide an RT decapeptide

[1] Applicants are advised that the Morris *et al.* (1999) reference was issued 27 August, 1999. The effective filing date of the instant application is 25 August, 2000. Since many journal articles are mailed and received prior to their issue date, the examiner is assuming the article was published more

inhibitor corresponding to aa 395-404 of the HIV-1_{BH10} isolate. This peptide is highly efficient in abolishing the production of viral particles both *in vitro* and in infected cells. The peptide inhibits dimerization of the two subunits of HIV-1 RT. This is the exact same region utilized by applicants. p7 was a potent inhibitor and the HIV-1 RT displayed an association rate of only $0.31x10^3$ M^{-1} s^{-1} and an activation rate of only 0.018 h^{-1} in the presence of peptide as compared to an association rate of $5.1x10^4$ M^{-1} s^{-1} and an activation rate of 0.178 h^{-1} in the absence of peptide (see Table 1, p. 24942; see *Peptides Derived from the Connection Domain Inhibit RT Dimerization in Vitro*, bridging paragraph, p. 24943). This teaching also discloses the utilization of MPG as a peptidyl carrier system to increase peptide delivery to the cell (see *Cell Delivery of the Peptide Inhibitor*, rt. col., p. 24943). The authors conclude that this peptide, as well as p7-MPG complexes, should prove quite useful as antiviral agents (see *Conclusion*, p. 24946). This teaching does not disclose peptide inhibitors other than p7 obtained from isolate HIV-1_{BH10}. However, Korber and colleagues provide multiple HIV-1, -2, and SIV RT sequence listings. Therefore, it would have been *prima facie* obvious to one of ordinary skill in the art at the time of the invention to make p7 inhibitory peptides and p7-MPG peptides that correspond to different viral isolates. This would make the peptides more useful as antivirals.

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than one year before the effective filing date which renders it applicable under 35 U.S.C. § 102(b). A request has already been submitted to the STIC to ascertain the true filing date of this publication. However, since this publication was available more than one year before applicants' earliest effective filing date, the declarations submitted under 37 C.F.R. § 1.132 are not sufficient to overcome the rejection.

Correspondence

Any inquiry concerning this communication should be directed to Jeffrey S. Parkin, Ph.D., whose telephone number is (571) 272-0908. The examiner can normally be reached Monday through Thursday from 10:30 AM to 9:00 PM. A message may be left on the examiner's voice mail service. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Bruce R. Campell, Ph.D., can be reached at (571) 272-0974. Direct general status inquiries to the Technology Center 1600 receptionist at (571) 272-1600. Informal communications may be submitted to the Examiner's RightFAX account at (571) 273-0908.

Applicants are reminded that the United States Patent and Trademark Office (Office) requires most patent related correspondence to be: a) faxed to the Central FAX number (571-273-8300) (updated as of July 15, 2005), b) hand carried or delivered to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), c) mailed to the mailing address set forth in 37 C.F.R. § 1.1 (e.g., P.O. Box 1450, Alexandria, VA 22313-1450), or d) transmitted to the Office using the Office's Electronic Filing System. This notice replaces all prior Office notices specifying a specific fax number or hand carry address for certain patent related correspondence. For further information refer to the Updated Notice of Centralized Delivery and Facsimile Transmission Policy for Patent Related Correspondence, and Exceptions Thereto, 1292 Off. Gaz. Pat. Office 186 (March 29, 2005).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully,

/Jeffrey S. Parkin, Ph.D./
Primary Examiner, Art Unit 1648

18 June, 2008